

REMARKS

Claims 1-12 are pending in this application.

Interview Conducted with Patent Examiner

Thanks are extended to the Patent Examiner for conducting a personal Interview with applicant's representative on November 18, 2003 in connection with the above-identified application. During the Interview, one point made by the Patent Examiner was that the previous Reply filed by applicants did not provide sufficiently clear reasons as to why one skilled in the art would not take the "dimple design" feature from the large-diameter golf ball of one prior art document and employ it in the small-diameter golf ball having other features described in a second prior art document. In response to this point, reasons are stated below regarding why one skilled in the art would not combine together the features of the two cited documents.

Issues under 35 U.S.C. § 103(a)

Claims 1-12 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Satoshi '958 (Japanese Patent Application No. 10-248958) in view of Yamagishi '503 (USP 5,601,503). This rejection is reversed for the following reasons.

Reasons that Dimple Design Yamagishi '503 Cannot Be Used in Golf Ball of Satoshi '958

At least two reasons exist against the attempt to employ the dimple design feature of the golf ball described in Yamagishi '503 with the other golf ball features described in Satoshi '958. First, Yamagishi '503 requires larger golf balls having a diameter of 43-47 mm and states several reasons specifically excluding smaller diameter golf balls, such as the golf balls disclosed by Satoshi '958. Second, Yamagishi '503 includes comparative test results which show that smaller diameter golf balls having the same diameter as the golf balls of Satoshi '958 exhibit inferior properties with compared to the larger diameter golf balls selected in Yamagishi '503.

Regarding the first reason mentioned above, Yamagishi '503 discloses at column 2, line 64 to column 3, line 2 that,

The golf ball has an outer diameter of 43 to 47 mm, preferably 43.3 to 46.3 mm. Outside the range, smaller diameter balls are difficult to hit high, not different from conventional golf balls, and detrimental to take the proper posture or stance upon address, failing to attain the objects of the invention.

Thus, it is clear that Yamagishi '503 describes a larger diameter golf ball which must have the larger diameter of 43-47 mm in order to achieve the properties desired for the described golf balls

therein. In this regard, note that Yamagishi '503 discloses the diameter of 43-47 mm in several different places in the specification, along with specifically describing the dimple design feature of the described golf ball. It is clear that the dimple design features of Yamagishi '503 are strongly tied to a larger golf ball diameter of 43-47 mm.

Regarding the second reason, attention is directed to Table 1 at the bottom of columns 5-6 of Yamagishi '503. All of the examples "E1-E4" directed to the invention described by Yamagishi '503 have diameters in the range of 43.5-46.1 mm which are all larger than the golf ball examples disclosed by Satoshi '958 having a diameter of 42.7 mm. Comparative Example "CE3" in Table 1 of Yamagishi '503 also has a larger diameter of 45.7 mm. Comparative Examples "CE1" and CE2" have smaller diameters of 42.7 mm, but both of these comparative exhibit disadvantageous, inferior properties with regard to distance (or "carry"), launch angle, ease of posturing, and feel as shown in Table 1 when compared to the inventive examples E 1-4. By the way, none of the examples or comparative examples in table 1 of Yamagishi '503 include the combination of: (1) the dimple design element recited in the present claims, and (2) the smaller golf ball diameter recited in the present claims. It is clear from of a review of Yamagishi '503 that the dimple design feature described therein is very strongly

tied to the larger golf ball diameter feature based on this evidence.

In view of the above, it is clear that one skilled in the art would not attempt to take the dimple design feature from the larger golf ball of Yamagishi '503 and attempt to use this feature on the smaller golf ball of Satoshi '958. In fact, the "intended purpose" of the golf ball design described by Yamagishi '503 was to improve distance, launch angle, ease of posturing and feel properties which are all inferior if one attempts to use a smaller diameter golf ball as shown by the comparative test results in Table 1 at columns 5-6. Thus, a hypothetical proposed modification of using the dimple design feature of Yamagishi '503 on a smaller diameter golf ball as disclosed by Satoshi '958 would, according to statements and evidence in Yamagishi '503, result in a golf ball exhibiting properties unsatisfactory for the intended purpose described in Yamagishi '503. If a proposed modification would render the prior art invention being modified unsatisfactorily for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 221 USPQ 1125 (Fed. Cir. 1984); MPEP 2143.02, rev. 1; Feb. 2003, page 2100-127.

In addition to the above, it is noted that Satoshi '958 includes golf balls having a diameter of 42.7 mm, but no golf balls having a diameter which overlaps with the Yamagishi '503 range of 43-47 mm. Satoshi '958 also does not include a specific disclosure

suggesting that the golf ball design features be employed in a larger diameter golf ball as described in Yamagishi '503. In this regard, there is an absence of a basis for a motivation to one skilled in the art to attempt to modify Satoshi '958 by employing the dimple design feature described by Yamagishi '503. Further, it is noted that the mere fact that references can be combined or modified does not render the resultant combination obviousness unless the prior art also suggests the desirability of the combination. In re Mills, 16 USPQ2d 1430 (Fed. Cir 1990); MPEP 2143.01, rev. 1, Feb. 2003, page 2100-126.

In summary, the dimple design feature and larger golf ball diameter feature of Yamagishi '503 cannot be separated. The significant inconsistencies between Yamagishi '503 and Satoshi '958 undermine the attempt to combine these documents together.

It is further submitted for the reasons stated below that significant patentable distinctions exist between the claims of the present application and the documents cited in the Office Action.

Distinctions between Present Invention and Satoshi '958

Satoshi '958 is mentioned at page 1 of the present specification. Satoshi '958 includes a "computer translation" into English which describes various materials for the core and cover of various golf balls. Satoshi '958 discloses in [0016]-[0017] a core which exhibits a compression in the range of 2.5-4.5 mm by applying

an initial load of 10 kg up to 130 kg. The computer translation of Satoshi '958 does not include specific information regarding the dimple diameter or contour lengths of the dimples. It appears that all the examples of Satoshi '958 are golf balls having a diameter of 42.7 mm.

Satoshi '958 fails to disclose or suggest the golf ball of the present invention which includes the feature of having at least 50% of the dimples with a contour length of greater than or equal to 11.6 mm. Therefore, significant patentable distinctions exist between the present invention and Satoshi '958.

Distinctions between Present Invention and Yamagishi '503

Yamagishi '503 discloses a golf ball having a diameter of 43-47 mm, "preferably 43.3 to 46.3 mm," (Column 2, lines 64-65). Yamagishi '503 also discloses a golf ball which includes a core that may be formed from a cross linked rubber composition as noted at column 4, lines 18-50, and a cover that may be formed from an ionmer resin as noted at column 5, lines 14-17. Yamagishi '503 further discloses that the core is recommended to undergo a distortion of 2.2-5.0 mm, especially 2.7-4.5 mm, under an applied load of 100 kg. Further, Yamagishi '503 discloses that the cover has a Shore D scale of at least 60, preferably 62-70 (col. 5, lines 19-21). A comparison of the ball diameter and dimple contour length features among the various examples and comparative examples

of Yamagishi '503 is provided in the attached table of Exhibit A. Examples 1-4 of Yamagishi '503 are described at columns 5-7 and include various dimple arrangements, the dimensions being summarized in Table 2 at column 7, lines 1-13.

Yamagishi '503 fails to disclose or suggest a golf ball, as in the present invention, which has a diameter with an upper limit of 42.85 mm. As noted above, all of the examples described by Yamagishi '503, i.e. Examples 1-4, have diameter in the range of 43.50-46.10 mm which are all greater than the diameter of the golf ball of the present invention. It is also noted that the smaller diameters of Comparative Examples 1 and 2 of 42.70 mm fail to include the appropriate percentage of dimples having a contour length of greater than or equal to 11.6 mm, such that these Comparative Examples are also inconsistent with the present invention. Consequently, it is submitted that significant patentable distinctions exist between the present invention and Yamagishi '503, such that the present claims patentably define over this document.

Reasons that Satoshi '958 Cannot Be Combined with Yamagishi '503

Yamagishi '503 is inconsistent with Satoshi '958, because Yamagishi '503 requires the golf ball diameter of a minimum of 43 mm, while Satoshi '958 allows for a smaller diameter of 42.7 mm as described at paragraph [0028]. Yamagishi '503 requires the outer

diameter of at least 43 mm in order to achieve the described improved trajectory. Note that Yamagishi '503 discloses at column 2, line 64 to column 3, line 2, that:

The golf ball has an outer diameter of **43 to 47 mm, preferably 43.3 to 46.3 mm**. Outside the range, smaller diameter balls are difficult to hit high, not different from conventional golf balls, and detrimental to take the proper posture or stance upon address, failing to attain the objects of the invention. [emphasis added]

It is further described at column 2, lines 15-25 of Yamagishi '503 that,

The golf ball has the problem that reducing the ball weight will lead to a higher trajectory, but a shorter flying distance. We have found that a golf ball having a weight of 40 to 45 grams, an outer diameter of **43 to 47 mm**, and dimples occupying at least 60% of the ball surface and satisfying $0.35 \leq V_0 \leq 0.60$ wherein V_0 is as defined above has improved flying performance in that it follows an adequately high trajectory to ensure an increased flying distance without following a low or sharply climbing trajectory when ordinary golfers with a head speed of about 40 m/sec. shoot it with a driver. [emphasis added]

In addition to the above, it is noted that the United States Golf Association has set a lower golf ball diameter limit of 42.67 mm, but has set no upper limit. Thus, so-called standard size golf balls have a diameter of in the range of about 42.67-42.85 mm,

whereas in contrast, so-called "big balls" have a diameter of about 43-47 mm. Consequently, it is very clear that Yamagishi '503 is directed to a so-called "big ball" from the above quoted portions.

Further, Yamagishi '503 clearly describes that a diameter less than 43 mm is disadvantageous and should not be used. This is further evidenced by the comparative test results shown in Table 1 at columns 5-6 wherein comparative Example Nos. 1 and 2 each have diameters of 42.70 mm and each exhibit inferior carry and trajectory angle properties when compared to Example Nos. 1-4 which are balls made in accordance with the description of Yamagishi '503. In contrast, Satoshi '958 fails to address or recognize any issues associated with requiring a minimum ball diameter of 43 mm, and in fact, simply describes a completely inconsistent ball diameter of 42.7 mm. The Final Office Action simply fails to describe any reason that the golf balls described by Yamagishi '503 should be modified to have a smaller diameter even though Yamagishi '503 states that a smaller diameter is "detrimental" and teaches away from attempting to make this modification. The Final Office Action fails to indicate any portion of Satoshi '958 which addresses or recognizes ball diameter properties in an attempt to achieve the advantages described in Yamagishi '503, or in an attempt to change any trajectory or carry golf ball properties at all. Additionally, Satoshi '958 fails to address or recognize any significance associated with the volume of dimple space which is

described as being critical in order to achieve the trajectory and carry properties disclosed in Yamagishi '503, and which must be varied within specific parameters in order to achieve these results.

In view of the above, Satoshi '958 cannot be combined with Yamagishi '503. Note the fact that the invention claimed in the present application may be within the capabilities of one of ordinary skill in the art fails to be sufficient by itself for establishing prima facie obviousness. In re Kotzab, 55 USPQ2d 1313, 1318 (Fed. Cir. 2000); and MPEP § 2143.01, page 2100-126. Further, the proposed modification of Yamagishi '503 to reduce the golf ball diameter described therein despite the description that detrimental properties will result is a proposed modification that renders the description in this prior art document unsatisfactory for its intended purpose. In re Gordon, 221 USPQ 1125 (Fed. Cir. 1984); and MPEP § 2143.02, page 2100-127. Consequently, because Satoshi '958 cannot be combined with Yamagishi '503, all the claim features of claim 1 have not been disclosed or suggested by the cited prior art document Yamagishi '503. Specifically, the claimed ball diameter of less than 43 mm fails to be disclosed or suggested by Yamagishi '503. Therefore, prima facie obviousness has not been established. In re Sang Su Lee, 61 USPQ2d 1430 (Fed. Cir. 2002); and MPEP 2143.03, page 2100-128.

It is submitted for the reasons stated above that the present claims define patentable subject matter such that this application should be placed into condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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